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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,898	12/08/2003	Hiroshi Ishikawa	040302-0361	9294
22428	7590	05/11/2007		
FOLEY AND LARDNER LLP SUITE 500 3000 K STREET NW WASHINGTON, DC 20007			EXAMINER TSOY, ELENA	
			ART UNIT	PAPER NUMBER
			1762	
			MAIL DATE	DELIVERY MODE
			05/11/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/728,898

Applicant(s)

ISHIKAWA ET AL.

Examiner

Elena Tsoy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) 7 and 8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 4/28/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

Election/Restrictions

1. Applicant's election of Claim 6 in the reply filed on March 27, 2007 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

The Examiner Note: since Applicants described nowhere meaning of L value in CIE colorimetric system, for examining purposes L value was interpreted as Hunter color values "L", "a", and "b" which can be measured with a HunterLab Spectrocolorimeter. The "L" value is a measure of lightness versus darkness or clearness versus cloudiness, higher values having greater lightness or clearness. The "a" and "b" values are measures of color. Positive "a" values indicate redness, and negative "a" values indicate greenness. Positive "b" values indicate yellowness and negative "b" values indicate blueness.

Claim Objections

2. Claims 1 and 9 are objected to because of the following informalities: "a effect pigment" is advised to be changed to "an effect pigment".

Specification

3. The disclosure is objected to because of the following informalities: "a effect pigment" throughout the specification (e.g. page 1, line 12; page 2, lines 21-22; page 8, line 27; page 9, line 30) is advised to be changed to "an effect pigment".

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-5, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Panush (EP 0148718 A2) in view of Dattilo (US 6,291,018).

Panush discloses a method for coating metal and plastic substrates (See page 4, line 17), comprising: coating a colored primer paint on the plastic substrate; coating at least one color base paint containing a color pigment and/or effect pigment (See page 27, lines 13-32; page 8, lines 1-18) on the primer paint; and coating a clear paint on the base paint (See page 33, lines 1-23).

As to a black plastic substrate, It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a method of Panush for plastic substrates of any color including black substrates with the expectation of providing the desired absolute hiding because Panush does not limit his teaching to any particular substrate color, and the method provides absolute hiding of any metal and plastic substrate. Note that metal has generally dark grey color.

As to L value of at least 80, Panush teaches that the primer contains specific pigments (See page 5, lines 32-33) such as *isoindolinone* yellow pigment (See page 14, line 1) at *controlled* levels (i.e. controlled L values) and has good hiding (See page 6, line 1). Panush discloses that the primer provides the **primary hiding** and the base color for less-than-hiding

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base coat (See page 6, line s 15-16). Panush also discloses that the amount of pigment blended with the base coat within 1-20 wt % (See page 3, lines 11-12) is sufficient to produce substrate hiding at 0.5 mils film (claimed more than 30 microns) thickness (See page 21, lines 19-22). The colored primer/basecoat/clear coat system may be made to provide *absolute* substrate hiding (See page 31, lines 1-32).

It is held that it is not inventive to discover the optimum or workable ranges of result-effective variables by routine experimentation. In re Antonie, 559 F.2d 618, 195 USPQ 6 (CCPA 1977). See also In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have determined the optimum concentration parameters of a pigment in a primer, i.e. optimum L values (including those of claimed invention) in Panush through routine experimentation in the absence of showing of criticality depending on particular pigment, substrate color, etc.

Panush does not expressly teach that at least one color base coat is applied as a first solid color layer and a second layer containing effect pigment.

Dattilo teaches that applying effect pigment-containing second basecoat layer over the first basecoat layer after flashing first basecoat material containing solid pigments provides polychromatic effect (See column 9, lines 3-9).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have applied first a solid color base coat, then after short flash a second effect pigment containing base coat with the expectation of providing the desired polychromatic effect, as taught by Dattilo.

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As to claims 4 and 9, it is held that concentration limitations are obvious absent a showing of criticality. *Akzo v. E.I. du Pont de Nemours* 1 USPQ 2d 1704 (Fed. Cir. 1987). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have determined the optimum values of the relevant concentration parameters of pigments in a primer and in a basecoat and optimum values of thickness of coatings (including those of claimed invention) in the cited prior art through routine experimentation in the absence of showing of criticality depending on particular required final tone of a composite film.

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Panush in view of Dattilo, further in view of Jackson et al (US 5962574).

Panush in view of Dattilo are applied here for the same reasons as above. Panush further teaches that a top coat is applied to a dried or cured primer (See page 4, lines 4-5). Panush fails to teach that the primer paint, the color base paint, the base paint and the clear paint are baked after coating in a wet on wet manner.

Jackson et al teach that a primer composition which exhibits top cat holdout in its uncured condition, so as to allow the primer to be coated over a substrate, for example, RIM urethane plastic, using a wet-on-wet technique with one or more topcoats, for example, both a color basecoat and clearcoat, in which only one curing step is needed to simultaneously cure the multi-layered coating to reduce production times and energy costs compared to a prior art primer which had to be cured before applying a top coat (See column 2, lines 1-10, 42-49).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have produced a multilayer film in Panush with the use of a primer resin

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composition of Jackson et al by applying the primer paint, the color base paint, the base paint and the clear paint in wet-on-wet manner followed by simultaneous baking of the applied film with the expectation of providing the desired reduced production times and energy costs, as taught by Jackson et al.

Conclusion

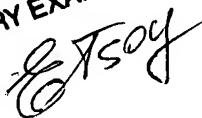
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elena Tsoy whose telephone number is 571-272-1429. The examiner can normally be reached on Monday-Thursday, 9:00AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Elena Tsoy
Primary Examiner
Art Unit 1762

ELENA TSOY
PRIMARY EXAMINER



May 9, 2007